We claim:

1. An immunogenic conjugate molecule comprising hyaluronic acid covalently bound to an immunologically-suitable polypeptide carrier.

2. The immunogenic conjugate according to claim 1, wherein greater than about 50% of the hyaluronic acid molecules possess a nonreducing terminal glucuronic acid and/or unsaturated glucuronic acid residue.

3. The immunogenic conjugate according to claim 2, wherein the hyaluronic acid is a low molecular weight hyaluronic acid with a molecular weight of about 400 Kd or less and a molecular weight of about 600 daltons or more.

4. The immunogenic conjugate according to claim 3, wherein at least 90% or greater of the low molecular weight hyaluronic acid fragments possess a nonreducing terminal glucuronic acid and/or unsaturated glucuronic acid residue.

5. The immunogenic conjugate according to claim 3, wherein at least 95% or greater of the low molecular weight hyaluronic acid fragments possess a nonreducing terminal glucuronic acid and/or unsaturated glucuronic acid residue.

6. The immunogenic conjugate according to claim 3, wherein at least 98% or greater of the low molecular weight hyaluronic acid fragments possess a nonreducing terminal glucuronic acid and/or unsaturated glucuronic acid residue.

7. The immunogenic conjugate according to claim 3, wherein at least 99% or greater of the low molecular weight hyaluronic acid fragments possess a nonreducing terminal glucuronic acid and/or unsaturated glucuronic acid residue.

8. The immunogenic conjugate according to claim 3, wherein the low molecular weight hyaluronic acid is about at least about 4 glycosyl residues in size.

9. The immunogenic conjugate according to claim 3, wherein the low molecular weight hyaluronic acid possess about 2 to about 20 disaccharide subunits.

10. The immunogenic conjugate according to claim 9, wherein the low molecular weight hyaluronic acid is about 2 to about 10 disaccharide subunits.

11. The immunogenic conjugate according to claim 3, wherein the polypeptide carrier is selected from the group consisting of tetanus toxoid, diphtheria toxoid, pertussis toxoid, an immunogenic polypeptide derived from streptococci, an immunogenic polypeptide derived from influenza, an immunogenic polypeptide derived from meningococci, an immunogenic polypeptide derived from pneumococci, and an immunogenic polypeptide derived from *E. coli*.

12. The immunogenic conjugate according to claim 3, wherein the polypeptide carrier is a porin from neisseria.

13. The immunogenic conjugate according to claim 3, wherein the conjugate is directly linked.

14. The immunogenic conjugate according to claim 3, wherein the conjugate elicits antibodies that bind an epitope comprising glucuronic acid or unsaturated glucuronic acid as the nonreducing terminal sugar of a low molecular weight hyaluronic acid.

15. The immunogenic conjugate according to claim 3, wherein the conjugate elicits

antibodies that bind capsular hyaluronic acid present in bacteria.

16. The immunogenic conjugate according to claim 15, wherein the bacteria is group A streptococci or group C streptococci.

17. A pharmaceutical composition comprising the conjugate according to claim 3 and a pharmaceutically acceptable carrier.

18. The pharmaceutical composition according to claim 17, further comprising a physiologically acceptable adjuvant.

19. A method of preparing a low molecular weight hyaluronic acid – polypeptide conjugate molecule comprising covalently linking low molecular weight hyaluronic acid fragments to an immunologically-suitable polypeptide, wherein about 50% or greater of the low molecular weight hyaluronic acid fragments have a glucuronic acid and/or an unsaturated glucuronic acid residue at the nonreducing terminal.

20. The method according to claim 19, wherein the method comprising covalently linking a low molecular weight hyaluronic acid to an immunologically-suitable polypeptide comprises reductive amination.

21. A purified antibody which binds to the immunogenic conjugate molecule according to claim 3.

22. The purified antibody according to claim 21, wherein the low molecular weight hyaluronic acid fragments are at least about 4 glycosyl residues in size.

23. The purified antibody according to claim 22, wherein the hyaluronic acid fragments are at

least about 4 glycosyl residues and no more than about 40 kD in size.

24. A pharmaceutical composition effective for treating or inhibiting group A streptococcal or group C streptococcal infection comprising an antibody selected from the group consisting of an antibody elicited by the composition according to claim 17, an antibody according to 21, or an antibody elicited by low molecular weight hyaluronic acid conjugated to a liposome.

25. A method of eliciting an antibody response in a mammal, said method comprising the step of administering to the individual mammal an amount of a pharmaceutical composition according to claim 17 in an amount which is sufficient to elicit an antibody response.

26. The method according to claim 25, wherein the mammal is a human.

27. The method according to claim 25, wherein the pharmaceutical composition is administered intramuscularly, subcutaneously, intraperitoneally or intravenously.

28. The method according to claim 25, wherein the pharmaceutical composition is administered in an amount of about 0.1 to about 50 micrograms per kilogram body weight.

29. A vaccine that elicits effective levels of anti-low molecular weight hyaluronic acid antibodies in humans comprising the immunogenic conjugate according to claim 3.

30. A method of inhibiting streptococcal infection in a mammal, comprising administering to the mammal a pharmaceutical composition according to claim 3 in an amount sufficient

to inhibit infection.

31. A method of inhibiting progression of infection in a mammal by bacteria containing HA, comprising administering to the mammal a composition comprising the pharmaceutical composition according to claim 24 in an amount sufficient to inhibit progression of the infection.

32. The method according to claim 31, wherein the bacteria are group A streptococci or group C streptococci.

33. A diagnostic immunoassay kit for detecting infection by streptococci comprising an antibody according to claim 21.